

Current sources of neural stem and progenitor cells for neural transplantation are essentially inaccessible in living animals. This invention relates to neural precursor cells (stem cells, progenitor cells or a combination of both types of cells) isolated from the olfactory epithelium of mammals that can be passaged and expanded, and that will differentiate into cell types of the central nervous system (CNS), including astrocytes, oligodendrocytes, and tyrosine-hydroxylase-positive neurons. These precursor cells provide an accessible source for autologous transplantation in CNS, PNS, spinal cord and other damaged tissues.